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ABSTRACT

The functions of support services participating in higher education institutional change are to provide information, power, and adaptability. An illustration of these support service roles in implementing institutional change at the University of Wisconsin-Oshkosh is discussed. The implementation of a new academic calendar was designed to increase student visibility for the institution, and promote faculty development activities. Innovations developed for the Registrar's Office illustrate power and adaptability but insufficient information provided about new policies to faculty and students. The Faculty Development Board illustrates the use of power since it determines in great measure the form in which courses will be offered. The Veterans Office's role in adapting the new calendar options to the needs of its clients illustrates adaptability. A framework is proposed for examining the relationship of each support service to an innovation. Although the model was developed specifically to evaluate the consequences of change, it is applicable during the planning stages of an innovation. The model consists of the following seven aspects of change: activity, structure, importance, power, volume, commitment, and indirect change. (SW)

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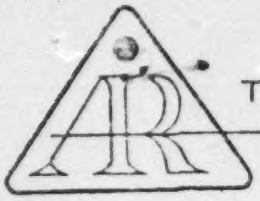

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SESSION 18

Title: UNIVERSITY SUPPORT SYSTEMS NECESSARY TO IMPLEMENT INSTITUTIONAL CHANGE

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Marie Draper Dykes

Most of the literature on innovations in higher education has hitherto focused on changes in the instructional situation, such as the introduction of new technology (e.g., computer-assisted instruction) or a revision of the traditional lecturer-listener mode of imparting information (e.g., independent study or contract learning). Instruction is, after all, a primary concern of the college or university, and so studies have tended to concentrate on how the innovations affect the student-faculty relationship or the student's learning.

The classroom relationship between faculty and students is only one of a network of relationships in a college or university, however, and what affects the nature and quality of student-faculty interaction has repercussions in all elements of the organization. The ancillary services of the institution can either inhibit or facilitate both the instructional mission and any changes that are contemplated for it, and the role of these so-called support services ought not to be overlooked in either the planning or the implementation of academic change.

The support services to be discussed here may be defined as those parts of the collegial bureacracy which create and maintain the environment in which the educational mission of the university can be carried out. Most of them fall under the general rubric of "the administration," and as such they are committed to any institutional change once the top-level administration has made the decision to implement it.

The strength of the commitment to an innovation and its implications for action can vary widely from office to office, however, because the various subsystems providing support to a university do not offer the same service, nore do they serve the same clients. Using general systems theory (see, for example, Katz and Kahn, 1966), the university can be classified into 1) managerial subsystems, concerned with the oversight of the entire organization, controlling, coordinating, and directing all its component parts (the Registrar's Office would fall into this category); 2) production subsystems, whose activities represent the major function of the organization (e.g., the library); 3) adaptive subsystems, whose purpose is to ensure the survival of the organization by keeping it alive to changes in its environment (institutional research and faculty development programs are examples of adaptive functions); 4) support susbystems, which (a) procure the raw materials necessary in the production process (e.g., Admissions), and (b) dispose of the finished product (i.e., Placement); and 5) maintenance subsystems, which "function to maintain the fabric of interdependent behavior necessary for task accomplishment. They tie people into the system as functioning parts (Katz and Kahn, 1966, p. 40)."

Most innovation literature has focused on how the decision is made to implement a change (and how the particular change is decided upon -- see, for example, Conrad (1973), or the planned-change literature of Bennis et al. (1966 and 1976)), or on who changes when and why (see Evans (1968), or diffusion of change theorists such as Rogers and Shoemaker (1971)). Because the support services do not typically initiate major institutional changes, the question of how the decision is arrived at is not really appropriate here. In addition, for the support services most innovations represent what Rogers and Shoemaker (1971) call authority decisions: "those forced upon an individual by someone in a superordinate power position.... The individual's attitude toward the innovation is not the prime factor in his adoption or rejection; he is simply told of and expected to comply with the innovation-decision which was made by an authority (36)."

In fact, one function of support services in a change situation is to serve as intermediaries between the decision-makers and the (potential) adopters. The first aspect of this intermediary role is interpretive, as the support services help to operationalize the changes. Support services provide information on the goals of the innovation, the exact nature of the changes, the expected role and responsibilities of each individual and each functional collection of individuals (office, department, etc.), procedures for solving problems that may arise from the innovation, and the latter's possible consequences.

Providing information is itself a supportive activity. All members of the organization need to be constantly reminded of what they are striving for and why they are making the effort. In an organization where management (administration), labor (faculty), and clients (students) are all together in the work situation, each party must have an elementary understanding of (if they are not always in agreement with) the goals of the other, in order that the basic task of the system might be accomplished. Awareness of each other's goals is an excellent way of facilitating implementation, in part because it can help subsystems avoid unintentionally obstructive actions (although it can also illumine the path to effective resistance).

The second aspect of the role of support services in academic change involves power. French and Raven (1959) identify five bases for social power: 1) reward power, or the ability of A to reward B; 2) coercive power, or the ability of A to punish B; 3) legitimate power, stemming from B's acceptance of A's right to influence, whether that acceptance comes from B's internalized cultural values, his acceptance of the social structure, or A's designation by a legitimizing agent; 4) referent power, based on B's identification with A, or his desire for such identification; and 5) expert power, where B perceives A to have knowledge of skill in a particular area. Support services have legitimate power by virtue of their position in the organizational hierarchy. Expert power is very important in a change situation, because the innovation may stand or fall on the ability of a support service to solve operational problems. For example, if a proposed change requires sophisticated computer programming, the data processing area must be able to provide that programming before the change can be said to have been implemented. If the expertise is there the service will gain influence (i.e., power) in future decision-making.

Reward and coercive power are also very important in institutional change, because of the desire to encourage activities consonant with the innovation and to discourage backsliding into the old, familiar ways of doing things. Thus if faculty development is a goal of the academic change, some support service should have the power to reward faculty for participating in development activities. It must be noted, however, that the support services, in their intermediary position, may themselves be rewarded or coerced into better fulfilling their own responsibilities in the implementation. This extra reinforcement is especially important for some of the maintenance subsystems (such as the health or counseling services) which may not be automatically affected by an academic change. Although the success of the change may not depend on a creative response from the most peripheral support services, when a creative response to some need of the innovation does occur, the innovation tends to be adopted more readily, implemented more easily, and integrated more permanently into the fabric of the university.

The third aspect of the role of support services in implementing academic change is adaptibility, or feedback -- taking note of aspects of the innovation that do not turn out as expected, adjusting to changed needs, redefining goals, smoothing out operational problems. Support services are in an excellent position to be sensitive to necessary modifications of the innovation because of their continuing contact with the people who must actually live with the change (faculty and students).

Thus support services participating in institutional change must provide information, power, and adaptibility. Which support services are best suited to fulfill this role depends on the nature of the innovation and on the clients served by the office. For a technological change, such as an on-line registration system, data processing provides the expertise to put the system into operation, but the Registrar's Office is better able to tie the system into faculty and student activities.

If the prospective change has a transitive goal (a transitive goal is "an intended impact of the organization upon its environment" -- Mohr (1973), p. 476), for example increased enrollment, then the support services most in contact with the environment -- especially the procurement and disposal subsystems -- are well-suited for the interpretive and informative role even when their own operations may not be directly affected by the change. Admissions officers are often questioned about campus happenings that are far removed from the admissions function, simply because the public may have no other source of information.

Most of what I have chosen to call support services have students as their primary clients, so that there is an abundance of sources of information, expertise, and feedback when the academic change affects students (as most academic changes eventually do). All the offices that comprise student services -- registration, admissions, academic advising, health, counseling, financial aid, etc. -- may play some part in implementing an innovation, although the further removed the support service is from the academic function of the organization (e.g., health services), the more imagination is required

to participate in an academic change. The Registrar's Office is probably the most influential support service vis-a-vis students because of its broad spectrum of responsibilities, from scheduling classes to issuing grade reports, which can be affected by so many different kinds of innovations.

As an illustration of this threefold conception of the role of support services in implementing institutional change, the University of Wisconsin-Oshkosh (UW-O) provides an instructive example. Beginning in June, 1975, UW-O began to implement a large-scale institution-wide innovation based on a new academic calendar. The reform was designed to increase student scheduling flexibility, attract non-traditional students, promote greater visibility for the institution, and increase greatly support for and interest in faculty development activities. The new calendar plan was actually only one of two major components of the overall change (the other being an extensive faculty development program taking advantage of the more numerous restructured time options). It reworked a traditional calendar of two 17-week semesters (plus a very limited 3-week winter interim and an 8-week summer term) into two 14-week semesters which were themselves broken into two 7-week blocks each, with each 14-week term followed by a 3-week interterm. The 8-week summer session was also to be broken into two 4-week blocks.

There were several other innovations implemented at UW-O beginning in the fall of 1975 which were not strictly a part of the revised calendar. A system of continuous registrarion for certain courses was devised which allows students to register for those courses at any time during the semester. The academic advising system was centralized in the administration building, and full-time advisors were hired for each of the four undergraduate colleges. An on-line computer registration procedure was designed which greatly simplifies and expedites the student's passage through course registration. The committee with overall responsibility for coordinating the calendar reform seems to have taken advantage of the general atmosphere of change and enthusiasm to do some spring cleaning in other areas of the university's programs. Nevertheless, all the changes were related to some more wide-ranging goals of the institution, which were articulated later as part of the calendar's external evaluation, including "Give program flexibility," "Increase curricular innovations," and "Development of instructional techniques."

There were basically three levels of participation in the calendar reform by the UW-O support services. On the first level, two of the support services, the Registrar's Office and Data Processing, were heavily involved in the decision-making phase of the reform, providing expert advice on the registration procedures, new academic policies, etc. These two offices are managerial and production subsystems which are well-established in the organizational hierarchy and central to the smooth running of the university. The calendar would by definition affect these offices (through the rescheduling of classes and on-line registration), and their input was essential to the effective planning of the innovation.

Two of the support services -- the New Students Division (Admissions, a procurement subsystem) and the Faculty Development Board (adaptive) -- did not exist per se before the innovation (admissions functions were previously subsumed in the Registrar's area of responsibility). The subsequent directors of both areas were individually heavily involved in the planning process, and it is not unlikely that they were appointed to these positions because of their involvement, either as a reward for services rendered or because they developed greater knowledge of the areas than anyone else.

At the next level of involvement, single members of the Media Services (production), the Placement Center (disposal), Financial Aid, Central Advising, and the Testing Center (all maintenance subsystems) provided some input to the work of the coordinating committee, but did not perceive themselves as having played an important role in the decision-making process. These support areas were relatively passive during the planning stages of the innovation, rather than acting to shape it themselves. They provided expertise for the planners of the change but did not serve as an information channel for their clients.

Most of the remaining maintenance susbystems had what could be called a man-on-the-street level of involvement: some of them were asked for their opinions on the calendar reform, but none were involved in planning it, and most felt that none of the coordinating committee's actions would affect them. These support services (including Health, Housing, Counseling, etc.) did not act as intermediaries at all during the planning of the calendar reform, but it must be remembered that these offices were much less likely to be affected by the change than were those taking a more active role.

After the new calendar was put into effect at UW-O, the support services participated in the innovation to about the same extent as they had participated in its development. The managerial, production, and adaptive subsystems were heavily affected by the restructured time options (as in the planning stage, this participation was largely required by the definition of the calendar reform).

Of all the support services, the innovation was most fully developed for the Registrar's Office, so much so, in fact, that operationalization of the changes far outstripped faculty and student understanding of the new policies and procedures. In this instance, the support service evidenced power and adaptibility, but did not provide sufficient information. When faculty are not informed of exactly how a particular new policy is supposed to work (and why), they are, unsurprisingly, likely to continue doing things in the traditional manner, setting up a conflict between the faculty and the Registrar's Office. The longer this conflict continues, the greater the likelihood that modifications will be made to bring the two sides closer together. Some of these modifications may well be desirable, but since the familiar system is always more comfortable to work with than the unfamiliar, the pressure to change will probably be stronger on the Registrar's Office to make the new system less different, i.e., less "innovative."

Modifications of this sort have already taken place throughout the university, predictably, as the first feeling of crisis has passed and the initial enthusiasm has worn off. The Registrar's Office was no exception, but there were several things that could have been done in an attempt to maintain the momentum of the changes being made in this service area. For one thing, if the innovation could not be as well-developed in other parts of the university, perhaps some of the changes in the Registrar's Office could have been more gradual, in order to allow time for each new policy or process to be assimilated. Better communication would also have smoothed the transition, perhaps including walking some of the faculty through the new registration process.

If the Registrar's Office illustrates the importance of the information function of support services, the Faculty Development Board provides an example of the uses of power. The faculty development program was a late addition to the calendar reform package, and the Faculty Development Board was created to oversee all elements of the program. Its functions are to develop policies on the distribution of support funds, and to evaluate faculty proposals for research and curriculum development. The new UW-O faculty development program has three main components: research, curriculum development, and in-service.

The Board had $200,000 at its disposal during the first two years of the innovation, and these funds gave the Board considerable reward power instrumental in determining the direction of future research and curriculum developments in the university. Because of its supervision of the curriculum development component, for example, the Faculty Development Board has acquired the power to determine in great measure in what form courses will be offered in future semesters. If, for example, faculty perceive the Board to be awarding curriculum development grants primarily to instructors who wish to put their courses into a computer-assisted, self-paced format, faculty could well put most of their efforts into this activity, to the exclusion of other forms of curriculum development.

The UW-O Veterans Office illustrates the adaptibility function of a support service. Staff in the Veterans Office faced perhaps the greatest challenge of all the support services during the planning stages of the calendar reform, having to persuade the state Veterans Administration to relax some of its regulations to permit veterans to take advantage of the calendar reform. Once the new calendar was underway, clients of this service probably benefitted more from the innovation than did clients of any other support service.

One of the benefits that is available only to veteran students is that it is possible to receive both federal VA benefits as a full-time student and state benefits as a part-time student at the same time. If the veteran student enrolls for ten credits during a 14-week term he is considered full-time under the modified federal regulations, but part-time according to the Wisconsin VA (this entitles him to receive payment for full tuition and books). Had the federal VA not been willing to cooperate in making its definition of full-time status more flexible, veteran students would probably

have been forced to enroll for courses during the interims in order to receive full benefits.

The juxtaposition of UW-O and VA policies (both federal and state) created something of a double standard of which veteran students (as opposed to non-veterans) received the benefit. In general, part-time students were not eligible for financial aid. Veterans enrolled for ten or eleven credits, however, who would be part-time according to UW-O's definition, could receive both full-time federal benefits and part-time state payments. Even with a part-time course load during the fall and spring terms veterans could still finish in four years if they enrolled for the maximum number of credits during the 8-week summer term. (This would be a full-time load under UW-O's definition, but still part-time according to the VA.)

The role of the Veterans Office staff in the new calendar is to make the students aware of all the alternatives and of the counseling available to help the veteran students avoid making mistakes in scheduling that might result in "GPA trouble." There is a very fine line between offering the best set of veterans' alternatives in the state and providing the least flexibility to veterans of any Wisconsin institution, and it is the task of the staff members to see that their student clients stay on the right side of that line.

Without the active efforts of the Veterans Office staff to adapt the new calendar options to the needs of its clients, veterans would eventually have rejected UW-O because of the lack of flexibility available to them. As it was, the farsightedness of this support service resulted in more flexibility (academic and financial) for veterans than for other students. Nevertheless, barring some as yet unforeseen circumstance enlarging the pool of eligible veterans, the role of the Veterans Office in attracting veterans to the institution and in counseling those in attendance will continue to diminish. The staff's constant efforts to match the innovation to its clients are perhaps even more admirable given the almost certain reduction in the need for this service.

Given the important role of support services in implementing institutional change, it is unfortunate that most of those writing on change today tend to overlook the support services in favor of the decision-makers and the potential adopters. I would like to propose a framework within which the relationship of each support service to an innovation can be examined. Although the model was developed specifically to evaluate the consequences of change (on which subject, too, there is a dearth of study), it is equally applicable during the planning stages of an innovation.

The model consists of seven aspects of change considered for each of the organizational subsystems, producing a matrix such as that in figure 1 (which shows the support services examined at the University of Wisconsin-Oshkosh). The seven dimensions of change may be defined as follows:

Figure 1

MATRIX OF CHANGE VARIABLES AND ORGANIZATIONAL SUBSYSTEMS

	Subsystems															
	Man	Productive			Adap	Support						Maintenance				
						Procure.		Disp.								
	RO	LIB	DP	MS	FDB	NSD	BOOK	CP/P	FA	CA	VO	TC	HC	CC	R/S	HO*
Structure																
Activity																
Volume																
Power																
Importance																
Ind. Change																
Commitment																

*University of Wisconsin-Oshkosh support services: RO - Registrar's Office LIB - Library DP - Data Processing MS - Media Services FDB - Faculty Development Board NSD - New Students Division (Admissions) BOOK - Bookstore CP/P - Career Planning and Placement FA - Financial Aid CA - Central Advising VO - Veterans Office TC - Testing Center HC - Health Center CC - Counseling Center R/S - Reading/Study Center HO - Housing Office

1) Structure refers to both the organizational position of a given support service and the relationships between roles within the support area. 2) Activity refers to the specific responsibilities of a support service. 3) Volume refers to a particular quantity pertinent to a given support service: activities to be performed; repetitions of a particular activity; student, faculty, or administrative contact; personnel or equipment required in the office; etc. 4) Power may take any or all of the forms discussed above (reward, coercive, legitimate, expert, or referent). 5) Importance refers to the degree to which a particular office is important to the success of the innovation and to the mission of the institution. 6) Indirect change is an important factor because it recognizes that support services, in particular, are affected by what happens to the clients they serve. Thus a support service's relationship to an innovation will be mediated both by the service's relationship to its clients and by its clients' relationship to the innovation. 7) Commitment includes but is not limited to belief in and agreement with the goals of the innovation. The other necessary ingredient is a willingness to become actively involved in planning and implementing the innovation, and to take the initiative in developing programs utilizing or contributing to the new system.

Relating these seven variables to the three-dimensional role of support services already discussed, it will be seen that power, as both a means and an end, is important enough to be mentioned separately. Adaptibility is the essence of the indirect change category, as support services react to the effects of the innovation on their clients. The structure variable is also relevant, however, as each support service must be both internally organized so as to make use of the feedback it receives and located in the institutional hierarchy in such a manner that the feedback can be passed on to other parts of the organization. The information aspect of the support services' role pervades the entire model: Is the service structured so as to permit the free flow of information? Does the office recognize information-giving as one of its principal acticities? Is the importance of this activity recognized? And so on.

During the planning stages of the innovation, the seven change variables might be most instructively considered in the following order:

1) Activity. Since most innovations will ultimately involve a change in the nature or the process of an organizational activity, the first consideration is how the overall change will be reflected in the activities of each subunit.

2) Structure is the next variable for consideration, as decision-makers must determine whether the current organizational patterns will allow for the efficient carrying-out of the new activities. Again, this question must be answered at the level of the subsystems as well as for the organization as a whole.

3) Importance. Each subsystem's role in the innovation is to be evaluated for its importance to the success of the new program. What are the consequences if the office failed to perform its new role satisfactorily?

This variable also has a bearing on other categories of change. Does the subsystem's current structure take into account its importance? Will the essential role of the subsystem result in the acquisition of more power (e.g., coercive power) than is organizationally acceptable?

4) Power. Decision-makers must be aware that new power-blocs may emerge following the innovation, and that the amount and nature of each subsystem's power will affect both the efficiency of the particular subsystem and the assimilation of the entire program.

5) Volume. The decision-makers must anticipate not only whether the innovation will have an effect (increase or decrease) on a subsystem's volume of activity, but also how great the effect will be, in order to plan for additional perssonel, a different work schedule, etc.

6) The commitment of personnel in each subsystem must be taken into account, because greater involvement is likely to result in more change, and in the direction of achieving the goals of the innovation.

7) Indirect change refers to the effect of the innovation on the clients of a particular subsystem or on some other individual or group with which it interacts. The more interaction between the subsystem and groups which were themselves affected by the innovation, the greater the likelihood that the subsystem will experience additional change. The nature of the change will depend on both the effect of the innovation on the clients and the relationship between the subsystem and its clients.

Figure 2 shows the kinds of effects that were predicted for each support service at the University of Wisconsin-Oshkosh as a result of the calendar reform, and figure 3 shows the changes that actually took place. (The indirect change and commitment categories were not added to the model until late in my analysis, so that no predictions were made of changes in these two areas.) The difference between the two figures is partly due to the limited attention paid by UW-O decision-makers to the possible consequences of the calendar reform for the support services. The use of this matrix aids decision-makers in identifying those support services most important to the success of the innovation, and the variables that either will affect the services' role in the implementation or will be affected by it.

Figure 2

CHANGES PREDICTED FOR UW-O SUPPORT SERVICES

	Subsystems															
	Man Productive				Adap.	Support			Maintenance							
						Procure.		Disp.								
	RO	LIB	DP	MS	FDB	NSD	BOOK	CP/P	FA	CA	VO	TC	HC	CC	R/S	HO
Structure	X		X	X	X	X										
Activity	X	X	X	X				X				X			X	
Volume	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X
Power	X			X	X											
Importance	X	X		X	X	X	X			X						
Ind. Change*																
Commitment*																

*Changes not predicted along this dimension.

RO - Registrar's Office LJB - Library DP - Data Processing MS - Media Services
FDB - Faculty Development Board NSD - New Students Division (Admissions) BOOK - Bookstore
CP/P - Career Planning and Placement FA - Financial Aid CA - Central Adivising VO - Veterans Office TC - Testing Center HC - Health Center CC - Counseling Center R/S - Reading/Study Center HO - Housing Office

Figure 3

CHANGES OCCURRING IN UW-O SUPPORT SERVICES

Subsystems

	Man.	Productive			Adap.	Support			Maintenance							
						Procure.		Disp.								
	RO	LIB	DP	MS	FDB	NSD	BOOK	CP/P	FA	CA	VO	TC	HC	CC	R/S	HO
Structure	0	*	0	0	0	0				0						
Activity	0	*	0		0						0					
Volume	0	*	0	0	0		0	0	0	0	0	0		0		0
Power	0	*	0		0						0					
Importance	0	*	0		0	0	0			0	0					
Ind. Change		*						0		0					0	0
Commitment		*	0				0				0					

*Insufficient information available for the Library.

RO - Registrar's Office LIB - Library DP - Data Processing MS - Media Services FDB - Faculty Development Board NSD - New Students Division (Admissions) BOOK - Bookstore CP/P - Career Planning and Placement FA - Financial Aid CA - Central Advising VO - Veterans Office TC - Testing Center HC - Health Center CC - Counseling Center R/S - Reading/Study Center HO - Housing Office

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